

## WHAT IS CLAIMED IS:

1 1. A seeding apparatus, comprising:

2 a metering wheel having a predetermined circumference which is a function of a  
3 predetermined plot length;

4 a rotation sensor to measure the rotation of a wheel and generate a signal in response  
5 thereto;

6 a controller to receive at least one signal from the rotation sensor and in response  
7 thereto generate a trigger signal;

8 a seed release mechanism to receive the trigger signal and in response thereto  
9 dispense seed substantially at said predetermined plot lengths.

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11 2. The apparatus of claim 1, wherein the rotation sensor is an electro-mechanical switch.

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13 3. The apparatus of claim 1, wherein the wheel circumference is an integral multiple of the  
14 predetermined plot length.

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16 4. The apparatus of claim 1, wherein the controller includes a programmable logic  
17 controller or a plurality of relays.

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19 5. The apparatus of claim 1, wherein the rotation sensor sends an integral number of sensor  
20 signals per wheel rotation and the controller sends a trigger signal after receiving a  
21 plurality of said sensor signals.

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23 6. The apparatus of claim 1, wherein the controller sends a trigger signal after an integral or  
24 fractional number of rotations of the wheel.

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26 7. The apparatus of claim 1, wherein the wheel is positioned behind the seeding apparatus.

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28 8. The apparatus of claim 1, wherein the wheel is on a tractor that is attached to the seeding  
29 apparatus.

31 9. The apparatus of claim 1, further comprising a user interface coupled to the controller to  
32 receive a plurality of seeding parameters input by a user.

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34 10. A method of dispensing seed, comprising:

35 sensing the rotation of a metering wheel having a predetermined circumference which  
36 is a function of a predetermined plot length;

37 generating a trigger signal after the wheel has traveled a distance substantially equal  
38 to the predetermined plot length;

39 releasing seed in response to the trigger signal substantially at said predetermined plot  
40 lengths.

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42 11. The method of claim 10, wherein the rotation sensor is an electro-mechanical switch.

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44 12. The method of claim 10, wherein the wheel circumference is an integral multiple of the  
45 predetermined plot length.

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47 13. The method of claim 10, wherein the trigger signal is generated by a programmable logic  
48 controller or a relay.

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50 14. The method of claim 10, wherein multiple signals are received from said rotation sensors  
51 for each trigger signal that is generated.

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53 15. The method of claim 10, wherein said wheel is positioned behind the seeding apparatus.

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55 16. The method of claim 10, further comprising inputting into a user interface coupled to a  
56 controller a plurality of seeding parameters.